1. A method of increasing the efficiency of a luminescent material having current carriers with a spin flip rate, an emissive singlet recombination channel, and a non-emissive triplet recombination channel, and wherein the singlet recombination cross section is greater than the triplet recombination cross section, the method comprising:

processing the luminescent material so as to increase the spin flip rate of the current carriers.

2. The method of claim 1, wherein the processing includes adding an impurity to the luminescent material.

3. The method of claim 1, wherein the processing includes a magnetic field.

4. The method of claim 1, wherein the processing includes an increase in effective spin temperature.

5. The method of claim 1, wherein the material is a polymer.

6. The method of claim 1, wherein the material is an oligomer

7. The method of claim 1, wherein the material is a molecular crystal.

8. The method of claim 1, wherein the material is a fullerene.

9. The method of claim 1, wherein the impurity is magnetically active.

10. The method of claim 1, wherein the impurity is a paramagnetic.

11. The method of claim 1, wherein the impurity facilitates low-frequency vibrations.

12. A light-emitting device incorporating the material of claim 1.

13. A method of improving the efficiency of an organic light-emitting material having carriers which exhibit a spin-lattice relaxation rate, the method comprising:

adding an impurity to the material so as to increase the spin-lattice relaxation rate of the carriers.

14. The method of claim 13, wherein the material is a polymer.

15. The method of claim 13, wherein the material is an oligomer.

16. The method of claim 13, wherein the material is a molecular crystal.

17. The method of claim 13, wherein the material is a fullerene.

18. The method of claim 13, wherein the impurity is magnetically active.

19. The method of claim 13, wherein the impurity is a paramagnetic.

20. The method of claim 13, wherein the impurity facilitates low-frequency vibrations.

21. A light-emitting device incorporating the material of claim 13.

22. An material for use in a high-efficiency light-emitting device, the material comprising:

an electro-luminescent compound in which useful light emission occurs only through the recombination of singlet excitons; and

an impurity, added so as to increase the spin flip rate of carriers propagating through the material.

23. An electro-luminescent device, comprising:

a first electrode;

an electro-luminescent layer supporting the flow of current carriers having a spin-flip rate;

a second electrode; and

an organic electro-luminescent material and an impurity added the electro-luminescent layer so as to increase the spin flip rate of the current carriers.

24. A laser, comprising:

a light-emissive layer from which light is emitted through the injection of current carriers having a spin-flip rate;

an optical resonator;

an organic electro-luminescent material and an impurity added to the light-emissive layer so as to increase the spin flip rate of the current carriers.